REPLACEMENT CLAIMS 11, 13, 17, 18

11. The parallel plate diode according to claim 1, wherein said metal electrode is made by kovar alloy. 13. The parallel plate diode according to claim 1, wherein there are recesses on 1 the surface where the two metal electrodes that make up the parallel plate diode contact the semiconductor material, wherein average diameter of the recesses on 3 one side is equal to or smaller than 0.7 micrometer while the average diameter of the recesses on the other side is bigger than 0.7 micrometer. 5 17. The parallel plate diode according to claim 1, wherein said semiconductor 1 material is liquid semiconductor material. 2 TOT 18. The parallel plate diode according to claim 1, wherein said semiconductor 1 material is high resistance metal alloy. 2 N 1